

DETAILED ACTION

Status of Claims

1. Claims 1-2, 6-24, and 26-28, filed May 26th, 2009 are currently under examination. Claims 1-2, 6-8, 11-15, and 16-24 have been amended, claims 3-5 and 25 are cancelled, and claims 26-28 are new.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted May 15th, 2009 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner. Please refer to applicants' copy of the 1449 form submitted herewith.

On page 6, cite numbers 4 and 5 were not considered by the Examiner as no copy of the references were submitted as required by 37 CFR 1.98(a)(2)(i).

Allowable Subject Matter

3. Claims 1-2, 6-24, and 26-28 are allowed.

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Douglas J. Sorocco on July 24th, 2009.

Start of Claim Amendments

1. (Currently Amended) A method of separating metal particulates from a slurry consisting essentially of liquid reducing metal, metal particulates, and salt particles, comprising:

concentrating the slurry by removing at least a portion of the liquid reducing metal to form a concentrated slurry; and

passing at least one constituent selected from the group consisting of a ~~separately prepared~~ liquid reducing metal or a ~~separately prepared~~ liquid salt through the concentrated slurry to thereby further concentrate the metal particulates, wherein the at least one constituent removes the salt particulates and the liquid reducing metal in the concentrated slurry from the metal particulates.

7. (Currently Amended) The method of claim 1, wherein the ~~separately prepared~~ liquid salt is maintained at a temperature is maintained at a temperature below the sintering temperature of the metal particulates.

8. (Currently Amended) The method of claim 7, wherein the ~~separately prepared~~ liquid salt is substantially an eutectic of NaCl and CaCl₂.

9. (Currently Amended) The method of claim 1, wherein the metal particulates are [[a]] Ti or a Ti alloy.

13. (Currently Amended) The method of claim 1, wherein the ~~separately prepared~~ liquid salt is heated to a temperature greater than about 600 °C.

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16. (Currently Amended) A method of separating metal particulates from a slurry consisting essentially of liquid reducing metal, metal particulates, and salt particulates, comprising the steps of:

introducing the slurry into a vessel having a ~~separately prepared~~ liquid salt therein, the constituents of the slurry and of the ~~separately prepared~~ liquid salt form layers due to density differences between the liquid reducing metal and the metal particulates, wherein the concentration of metal particulates is increased at the bottom of the vessel;

removing the liquid reducing metal from the vessel;

separating the concentrated metal particulates along with a portion of the liquid salt from the vessel;

filtering the withdrawn portion of the liquid salt from the separated and concentrated metal particulates and,

cooling and water washing the remaining ~~liquid~~ salt from the separated and concentrated metal particulates.

17. (Currently Amended) The method of claim 16, wherein the ~~separately prepared~~ liquid salt is substantially the same as the salt particulates.

18. (Currently Amended) The method of claim 16, wherein the ~~separately prepared~~ liquid salt is a mixture of the salt particulates.

19. (Currently Amended) The method of claim 16, wherein the ~~separately prepared~~ liquid salt is a eutectic of the salt particulates.

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21. (Currently Amended) The method of claim 16, wherein the ~~separately prepared~~ liquid salt is maintained at a temperature of less than about 800°C.
22. (Currently Amended) The method of claim 16, wherein the ~~separately prepared~~ liquid salt is maintained at a temperature of about 600°C.
26. (Currently Amended) The method of claim 1, wherein the ~~separately prepared~~ liquid salt is prepared from liquid salt recycled after passing through the concentrated slurry.
27. (Currently Amended) The method of claim 7, wherein the ~~separately prepared~~ liquid salt is substantially the same as the salt particulates.
28. (Currently Amended) The method of claim 16, wherein the ~~separately prepared~~ liquid salt is prepared from liquid salt recycled after being filtered from the metal particulates.

End of Claim Amendments

Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance:

The closest prior art of Armstrong (US 5,958,106) and Keller (US 2,846,303) do not teach or suggest (with respect to instant claim 1) passing liquid reducing metal or liquid salt through concentrated slurry products to concentrate the metal particulates therein as Armstrong only teaches recirculating Na to the reaction chamber, not the product separator and there is no suggestion from Armstrong to concentrate the

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slurry in the product separator by both removing at least some liquid reducing metal and also adding liquid reducing metal and or liquid salt.

With respect to instant claim 16, Keller does not disclose a decantation step where a slurry is introduced into a vessel having a liquid salt therein, where liquid salt is filtered from the separated and concentrated metal particulate before a cooling a water washing of any remaining salt.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark L. Shevin whose telephone number is (571) 270-3588 and fax number is (571) 270-4588. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy M. King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Mark L. Shevin/
Examiner, Art Unit 1793

July 25th, 2009
10-526,918

/George Wyszomierski/
Primary Examiner
Art Unit 1793